NOTES ON NORTH AMERICAN LEPIDOPTERA.

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Plebeus lupini ab. immaculata ab. nov.

This aberration is like the typical *lupini* except that it lacks all markings on the lower surface of the secondaries, but has the usual row of marginal spots. The submarginal row is totally obliterated.

Holotype, July 14, 1921; Topoparatype, July 14, 1921; Gold Lake district, Sierra Co., Calif.

This aberration resembles *P. acmon* var. *cotteli* ab. *labecula* and bears the same relationship to *lupini* as *labecula* does to *cotteli*. I have several transitional specimens of *lupini* to *immaculata*, but do not consider them worthy of a name.

Glaucopsyche xerces var. intermedia var. nov.

This variety is probably the connecting link between *G. xerces* and its forms. *G. xerces* has the spots on the undersurface solid white, while all of its forms and aberrations have white spots with black centers, in some cases the white almost lacking. This new variety does not differ much from *polyphemus* as to size of markings except that the two spots in the discal area are fused into one elongate white marking. The other spots differ in that they are white and have the centers the same color as the general ground color of the wings below. The ground color is the same and typical *G. xerces*.

Holotype, March 17, 1926; Allotype, March 21, 1925; Lone Mountain, San Francisco, Calif.

I have had in my possession about 200 specimens of *G. xerces* and varieties and forms and I am of the opinion that this variety is the connecting link, therefore I call it 'intermedia.'

Fentonia marthesia ab. nigra., ab. nov.

This aberration is the same as typical *F. marthesia*, except that the primaries are totally black above. The secondaries have a broad black marginal band, with white fringe above. The entire underside of both wings is darker than normal specimens. The thorax is a dark olive green, the body black above, below normal.

Holotype, August 15, 1924; Pittsburgh, Pa.

I reared this aberration along with several typical specimens.

Cercyonis (Satyrus) pegala race borealis.

This race is like typical *pegala* except that it almost totally lacks the yellow patch on the primaries above. Below the patch is restricted to rings around the spots.

The male has one spot on the primaries which will facilitate the separating of it from its close ally. S. alope var. nephele is much smaller than borealis.

Holotype, VII-10-1920; Allotype, VII-4-1920; Trumball Co., Ohio.

Eurymus eurytheme f. eriphyle var. nigricosta, var. nov.

This variation of *eriphyle* occurs in the female sex only. It is the same as typical *eriphyle*, except that the yellow spots in the marginal band are lacking in both wings. It bears the same relationship to eriphyle as *plicandula* does to philodice.

Holotype, VIII-1-1924; Topoparatype, VIII-1-1924; Edmondton, Alberta, Canada.

Eurymus eurytheme f. eriphyle ab. laurae.

This fine aberration is the same as typical *eriphyle* female, except that the yellow is replaced by white. The secondaries above are clouded with black.

I took this specimen with a male of typical *eriphyle* and considered it a very unusual capture.

Holotype, VIII-1-1924; Edmondton, Alberta, Canada.

Eurymus philodice var. serrata.

This peculiar variation which occurs in the male sex only, as far as I can see, differs from typical *philodice* in that the inner margin of the marginal band is serrate or dentate. These teethlike markings occur between the veins. Out of at least two or three thousand specimens I have taken about eight or nine of this variety. At present I have six, all collected at Rossgrove, near Aspinwall, Pa. This locality is noted for peculiar specimens due to its very odd topography. There are arid spots and swamps in this bowl and this probably accounts for the unusual specimens.

Holotype, VIII-8-1926; paratypes, No. 1, VIII-8-1926; Nos. 2, 3, 4, VIII-10-1926; No. 5, VIII-12-1926; Rossgrove, near Aspinwall, Pa.